WHAT IS CLAIMED IS:

1. A smoking cessation method, said method comprising:

measuring a blood nicotine concentration while a patient is smoking;

determining at least two values corresponding to patient characteristics selected from the group consisting of a body mass factor, a cumulative smoking factor, a psychological dependence factor, age, and menopausal status; and

administering nicotine to the patient at an initial dosage determined based on said blood nicotine concentration and said at least two values.

2. A method as in claim 1, wherein the nicotine is administered transdermally with the initial dosage controlled by the area of transdermal delivery.

3. A method as in claim 1, wherein the nicotine is administered transdermally with the initial dosage controlled by the concentration of nicotine in a transdermal patch.

4. A method as in claim 1, wherein the initial dosage is determined to maintain a target serum nicotine level in the patient which is at least 40% of the smoking nicotine concentration.

5. A method as in claim 1, wherein the patient is a male and the patient characteristics include at least a body mass factor and a cumulative smoking factor.

6. A method as in claim 5, wherein the body mass factor is a body mass index which is weight divided by height squared and wherein the cumulative smoking factor is the number of packs smoked per day immediately prior to cessation times the number of years smoked.

7. A method as in claim 5, wherein the patient characteristics further include a psychological dependence factor, which is measured using the Fagerström Tolerance Questionnaire.

8. A method as in claim 7, wherein the patient characteristics further include age measured as years.

9. A method as in claim 1, wherein the patient is a female and the patient characteristics include at least a psychological dependence factor and age.

10. A method as in claim 9, wherein the psychological dependence factor is measured using the Fagerström Tolerance Questionnaire and age is measured as years.

11. A method as in claim 9, wherein the patient characteristics further include menopausal status, wherein no factor is introduced for pre-menopausal women and wherein a body mass factor is introduced for post-menopausal women.

12. A method as in claim 11, wherein the patient characteristics further include a body mass factor which is weight divided by height squared.

13. A method as in claim 1, wherein the blood nicotine level is measured as a stable nicotine metabolite.

14. A method for determining a relationship between nicotine dosage and nicotine serum concentration in a population of patients who smoke tobacco, said method comprising:

measuring blood nicotine concentrations in individual patients in said population while said individuals are smoking;

administering a known dosage of nicotine to the patient after the patient has stopped smoking;

measuring blood nicotine concentrations in each individual patient while administering nicotine and while the patient refrains from smoking;

determining at least two values corresponding to characteristics from each individual patient selected from the group consisting of a body mass factor, a cumulative smoking factor, a psychological dependence factor, age, and menopausal status; and

determining a relationship between nicotine dosage and nicotine serum concentration as a function of blood nicotine concentration while smoking and said at least two patient characteristics.

15. A method as in claim 14, wherein the dosage is administered transdermally with at least one patch, wherein the determined relationship is blood nicotine level per patch.

16. A method as in claim 14, wherein the patient is a male and the patient characteristics include at least a body mass factor and a cumulative smoking factor.

17. A method as in claim 16, wherein the body mass factor is a body mass index which is weight divided by height squared and wherein the cumulative smoking factor is the number of packs smoked per day immediately prior to cessation times the number of years smoked.

18. A method as in claim 16, wherein the patient characteristics further include a psychological dependence factor, which is measured using the Fagerström Tolerance Questionnaire.

19. A method as in claim 18, wherein the patient characteristics further include age measured as years.

20. A method as in claim 14, wherein the patient is a female and the patient characteristics include at least a psychological dependence factor and age.

21. A method as in claim 20, wherein the psychological dependence factor is measured using the Fagerström Tolerance Questionnaire and age is measured as years.

22. A method as in claim 20, wherein the patient characteristics further include menopausal status, wherein no factor is introduced for pre-menopausal women and wherein a body mass factor is introduced for post-menopausal women.

23. A method as in claim 22, wherein the patient characteristics further include a body mass factor which is weight divided by height squared.

24. A method as in claim 14, wherein the blood nicotine level is measured as a stable nicotine metabolite.